

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby appoint:

☒ Practitioners associated with the Customer Number:

45979

OR

☐ Practitioner(s) named below (If more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number

As attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with the patents and patent applications assigned only to the undersigned according to the USPTO assignment records as shown on the Statements Under 37 CFR 3.73(b) attached.


Assignee Name and Address:

Microsoft Corporation

A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/98 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application in which this Power of Attorney is to be filed.

## SIGNATURE of Assignee of Record

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Name	D. Bentley Eppeneuer		
Signature		Date	8-31-04
Title	Assistant Corporate Secretary	Telephone	425-703-0645

**STATEMENT UNDER 37 CFR 3.73(b)**Applicant/Patent Owner: Wang et al.Application No./Patent No.: 7,263,224 Filed/Issue Date: August 28, 2007Entitled: STROKES LOCALIZATION BY M-ARRAY DECODING AND FAST IMAGE MATCHING

Microsoft Corporation, a Corporation  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.  
 (The extent (by percentage) of its ownership interest is \_\_\_\_\_ %)

in the patent application/patent identified above by virtue of either:

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 015289, Frame 0354, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
 The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
 The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
 The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☒ As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Maurice J. Pirio  
 Signature

5-2-08  
 Date

Maurice J. Pirio  
 Printed or Typed Name

(206) 359-8000  
 Telephone Number

Attorney for Assignee  
 Title

PATENTS ONLY

Tab settings ⇨ ⇨ ⇨ ▼ ▼ ▼ ▼ ▼ ▼ ▼

To the Honorable Commissioner of Patents and Trademarks: Please Record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Jian Wang  
Yingnong Dang  
Qiang Wang  
Liyong Chen  
Xiaoxu Ma

Additional name of conveying party(ies) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies)

Name: Microsoft Corporation

Internal Address: \_\_\_\_\_

Street Address: One Microsoft Way

City: Redmond State: WA Zip: 98052

Additional Name(s) & address(es) attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other \_\_\_\_\_

Execution Date: January 14, 2004 and January 15, 2004  
and February 12, 2004

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)  
10/759,357

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☐ No

5. Name and address of party to whom correspondence concerning this document should be mailed:

Name: Kenneth F. Smolik

Internal Address: Banner & Witcoff, Ltd.

Street Address: 10 South Wacker Drive

Suite 3000

City: Chicago State: IL Zip: 60606

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41) .....\$ 40.00

- ☐ Enclosed  
☒ Authorized to be charged to deposit account

8. Deposit account number:

19-0733

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

Kenneth F. Smolik  
Name of Person Signing

Kenneth F. Smolik  
Signature

May 3, 2004  
Date

Total number of pages including cover sheet, attachments, and documents:

Mail documents to be recorded with required cover sheet information to:  
Mail Stop Assignment, Recordation Services, Director of the US Patent and Trademark Office

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Inventorship..... Wang et al.  
Applicant..... Microsoft Corporation  
Attorney's Docket No. .... 003797.00627  
MS Docket No. ....MS# 305971.01  
Title: STROKES LOCALIZATION BY m-ARRAY DECODING AND FAST IMAGE  
MATCHING

**PATENT ASSIGNMENT**

**PARTIES TO THE ASSIGNMENT**

**Assignor(s):**

Jian Wang  
Microsoft Research Asia  
5F, Beijing Sigma Center  
No. 49, Zhichun Road, Haidian District  
Beijing 100083, P.R. China

Yingnong Dang  
Microsoft Research Asia  
5F, Beijing Sigma Center  
No. 49, Zhichun Road, Haidian District  
Beijing 100080, P.R. China

Qiang Wang  
Microsoft Research Asia  
5F, Beijing Sigma Center  
No. 49, Zhichun Road, Haidian District  
Beijing 100080, P.R. China

Liyong Chen  
Microsoft Research Asia  
5F, Beijing Sigma Center  
No. 49, Zhichun Road, Haidian District  
Beijing 100080, P.R. China

Xiaoxu Ma  
550 Memorial Drive, Apt. 15D1  
Cambridge, MA 02139

**Assignee:**

Microsoft Corporation  
Corporation in the State of Washington  
One Microsoft Way  
Redmond, WA 98052

**AGREEMENT**

WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled "STROKES LOCALIZATION BY m-ARRAY DECODING AND FAST IMAGE MATCHING," as described and claimed in the specification forming part of an application for United States letters patent referenced above, which application was executed by said assignor(s) on the same date appearing next to the signature of said assignor(s) appearing below;

WHEREAS, Microsoft Corporation (hereinafter referred to as ASSIGNEE), a corporation of the State of Washington having a place of business at One Microsoft Way, Redmond, WA 98052, is desirous of acquiring the entire right, title and interest in and to the invention and in and to any letters patent that may be granted therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sell, assign and transfer unto ASSIGNEE, the entire right, title and interest in and to said invention, said application and any and all letters patent which may be granted for said invention in the United States of America and its territorial possessions and in any and all foreign countries, and in any and all divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise, said invention, application and all letters patent on said invention to be held and enjoyed by ASSIGNEE and its successors and assigns for their use and benefit and of their successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNOR(S) had this assignment, transfer and sale not been made. ASSIGNOR(S) hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR(S) agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding said letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

2004/2/12  
Date:

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

Jian Wang  
Jian Wang

\_\_\_\_\_  
Yingnong Dang

\_\_\_\_\_  
Qiang Wang

\_\_\_\_\_  
Liyong Chen

\_\_\_\_\_  
Xiaoxu Ma

**AGREEMENT**

WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled "**STROKES LOCALIZATION BY m-ARRAY DECODING AND FAST IMAGE MATCHING**," as described and claimed in the specification forming part of an application for United States letters patent referenced above, which application was executed by said assignor(s) on the same date appearing next to the signature of said assignor(s) appearing below;

WHEREAS, Microsoft Corporation (hereinafter referred to as ASSIGNEE), a corporation of the State of Washington having a place of business at One Microsoft Way, Redmond, WA 98052, is desirous of acquiring the entire right, title and interest in and to the invention and in and to any letters patent that may be granted therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sell, assign and transfer unto ASSIGNEE, the entire right, title and interest in and to said invention, said application and any and all letters patent which may be granted for said invention in the United States of America and its territorial possessions and in any and all foreign countries, and in any and all divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise, said invention, application and all letters patent on said invention to be held and enjoyed by ASSIGNEE and its successors and assigns for their use and benefit and of their successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNOR(S) had this assignment, transfer and sale not been made. ASSIGNOR(S) hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR(S) agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding said letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

Date: Jan 15, 2004  
Date: Jan 15, 2004  
Date: Jan 15, 2004  
Date: \_\_\_\_\_  
Date: \_\_\_\_\_

Jian Wang  
Dang Yingnong  
Yingnong Dang  
Qiang Wang  
Qiang Wang  
Liyong Chen  
Liyong Chen  
\_\_\_\_\_  
Xiaoxu Ma

**AGREEMENT**

WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled "STROKES LOCALIZATION BY m-ARRAY DECODING AND FAST IMAGE MATCHING," as described and claimed in the specification forming part of an application for United States letters patent referenced above, which application was executed by said assignor(s) on the same date appearing next to the signature of said assignor(s) appearing below;

WHEREAS, Microsoft Corporation (hereinafter referred to as ASSIGNEE), a corporation of the State of Washington having a place of business at One Microsoft Way, Redmond, WA 98052, is desirous of acquiring the entire right, title and interest in and to the invention and in and to any letters patent that may be granted therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sell, assign and transfer unto ASSIGNEE, the entire right, title and interest in and to said invention, said application and any and all letters patent which may be granted for said invention in the United States of America and its territorial possessions and in any and all foreign countries, and in any and all divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise, said invention, application and all letters patent on said invention to be held and enjoyed by ASSIGNEE and its successors and assigns for their use and benefit and of their successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNOR(S) had this assignment, transfer and sale not been made. ASSIGNOR(S) hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR(S) agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding said letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

\_\_\_\_\_  
Date:

\_\_\_\_\_  
Jian Wang

\_\_\_\_\_  
Date

\_\_\_\_\_  
Yingnong Dang

\_\_\_\_\_  
Date

\_\_\_\_\_  
Qiang Wang

\_\_\_\_\_  
Date

\_\_\_\_\_  
Liyong Chen

Jan. 14, 2004  
Date

Xiaoxu Ma  
Xiaoxu Ma